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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,329	05/02/2005	Martin P McCormick	1290US2	5368
25279	7590	05/28/2008		
GRACO MINNESOTA INC PO BOX 1441 MINNEAPOLIS, MN 55440			EXAMINER BAYOU, AMENE SETEGNE	
			ART UNIT 3746	PAPER NUMBER
			MAIL DATE 05/28/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/533,329

Applicant(s)

MCCORMICK ET AL.

Examiner

AMENE S. BAYOU

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE/IB)
Paper No(s)/Mail Date 03/29/2007 and 08/01/2005
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 2 are rejected under 35 U.S.C 103(a) as being unpatentable over Hayes (US patent number 4547128) in view of Flemming et al (US patent number 4878601) further in view of Loeser (US patent number 3097764) and Chine et al (US patent number 6161723).
3. In re claim 1, Hayes '128 discloses a proportional mixing means including:
 - A proportioner (11) in figure 1, for dispensing plural component materials, proportioner (11) comprising: A variable speed electric motor (41) having a shaft (43 and 45) and first and second ends ; shaft (43 and 45)extending from each of ends ;a first pump (21) attached to first motor end (using shaft 43), pump being connected to a source of a first material (13) and having an output (39) which has a first pressure; a second pump (23) attached to second motor end (using shaft 45) , pump being connected to a source of a second material (15) and having an output (49) which has a second pressure, first and second pumps (21 and 23) being the only pumps between material sources and outputs.

But Hayes '128 fails to disclose :

- Reciprocating piston pump
- pumps simultaneously pumping materials to an applicator;
- A controller with provision for a user-selectable set point, said controller continually comparing first and second pressures and regulating the higher of pressures to set point.

However Flemming et al '601 teach a liquid dispenser including:

- Reciprocating piston pump (90), in figure 5.

And ,Loeser '764 teaches a proportioning system having:

- Pumps (5-8) simultaneously pumping materials to an applicator in figure 1 and column 2 ,lines 1-4 and 71-72.

Also, Chine et al '723 teach an apparatus for dispensing liquids and solids including:

- A controller (14) with provision for a user-selectable (20) set point (column 7 lines 22-24), controller (14) continually comparing first and second pressures and regulating the higher of pressures to set point (step 514 of figure 28) ,in figures 1, 28 and column 17,lines 31-33.

4. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the proportional mixing means of Hayes '128 by including a reciprocating pump simultaneously pumping materials as taught by Flemming et al '601 for low cost operation (by the design choice of piston pump) . And It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the modified proportional mixing means of

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Hayes '128 and Flemming et al '601 by pumping materials simultaneously as taught by Chine et al '723 in order to efficiently control the fluid mixing operation and increase the efficiency (because of reduced pumping time).

5. In re claim 2, Hayes '128 modified by Flemming et al '601 and Loeser '764 further modified by Chine et al '723 discussed disclose the claimed invention:

Hayes '128 discloses :

- A proportioner (11) in figure 1, for dispensing plural component materials, proportioner (11) comprising: A variable speed electric motor (41) having a shaft (43 and 45) and first and second ends ; shaft (43 and 45) extending from each of ends ; a first pump (21) attached to first motor end (using shaft 43), pump being connected to a source of a first material (13) and having an output (39) which has a first positive pressure; a second pump (23) attached to second motor end (using shaft 45) , pump being connected to a source of a second material (15) and having an output (49) which has a second positive pressure.

Flemming et al '601 disclose:

- Reciprocating piston pump (90), in figure 5.

Loeser '764 discloses:

- Pumps (5-8) simultaneously pumping materials to an applicator in figure 1 and column 2 , lines 1-4 and 71-72.

Chine et al '723 disclose:

- A controller (14) with provision for a user-selectable (20) set point (column 7

lines 22-24), controller (14) continually comparing first and second pressures and providing an alarm in the event one of pressures falls to a predetermined percentage of set point, in figures 1, 28 and column 17, lines 31-33 and column 18 lines 5-7.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Matsumoto et al (US patent publication number 2004/0228740A1) disclose a rotary fluid machine. Shimano (US patent number 5277333) discloses an apparatus for metering and discharging a liquid. Merkel (US patent number 4613059) discloses a pressure monitor in dispensing system. Miller et al (US patent number 5305917) disclose simultaneous dispensing apparatus

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amene S. Bayou whose telephone number is 571-270-3214. The examiner can normally be reached on Monday-Thursday, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on 571-272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

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more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devon C Kramer/
Supervisory Patent Examiner, Art
Unit 3746